

P. 310. Heteropterous Hemiptera. Only the first eight pages of this tract were printed in 1831, as is evident from the fact that on p. 19 [322 of Compl. Writ.] under *Pentatoma bifida*, Say's new species etc. found by Barabino [p. 300] is referred to, which was printed "January, 1832." All the remainder of this tract, therefore, must have been issued after that date. [The first signature also contains, on p. 5 [316], under the description of *Pentatoma hilaris* a similar reference. A copy of the original tract is in the Boston society of natural history.]

P. 364. *Belostoma fluminea*. [var. *a*, immaculatus does not appear in the first Barabino pamphlet.]

P. 369. Correspondence. See Southern Agriculturalist, Charleston, S. C., Vol. i, p. 203. [There follows in the Disseminator an apology to Dr. Capers for publishing his letter without consult-

ing him, signed T. S. Dr. Harris's copy of this Correspondence is bound up with a New Harmony pamphlet (Compl. Writ., ii, 521) as a leaf from the Disseminator (with other matter) pasted between the title page and the paper proper and unnumbered; whether it was printed earlier or later does not appear; my own copy of the pamphlet does not contain it.]

P. 373. Description of Hymenoptera. [Dr. Harris gives January, 1829, as the date of publication.]

P. 387. line 1; for scutel, read suture.

P. 390. *Elatér unicolor*. Nails pectinated.

P. 393. *Elatér erosus*. Compare this with *Eucnemis atropos*; it is possible it may be congeneric.

P. 395. *Elatér silaceus*. Length nearly three tenths of an inch.

P. 395. *Elatér rubricus*. Abdomen black.

ON ALEBRA AND RELATED GENERA.

BY C. F. BAKER, ST. CROIX FALLS, WISC.

The Typhlocybid genus Alebra is separated from others of the tribe by the fact that the elytron possesses a well developed appendix. The wing resembles that of the higher Jassids in being distinctly margined, and with three apical cells.

There are in my collection fourteen Brazilian species of the Typhlocybini in which the elytron possesses an ap-

pendix. As far as the wings are concerned, however, twelve of these species are not at all like Alebra, as in these the margin of the wings is entirely obsolete around the apex.

Five of these Brazilian species which I had loaned Mr. Gillette were described under Alebra in his late paper on the Typhlocybini. (Proc. Nat. Mus. XX). Only one of these (*dor-*

salis) was a true Alebra. The other four (part of the twelve mentioned above) are not Alebra, and although in one species a wing is figured, yet no mention is made of its peculiar structure. These species, which Gillette describes under Alebra, could not possibly be placed in that genus by the use of his own synopsis immediately preceding the descriptions.

The last of the fourteen species mentioned above differs from all the rest in wanting the elytral appendix, though it possesses a typical Alebra wing and has the general habitus of an Alebra. It represents the type of a new genus which I shall call *EUALEBRA*.

The relation of these genera to others of the tribe Typhlocybini may be shown best in tabular form, as follows:—

Appendix present.

Wing distinctly margined around apex, *Alebra*.

Wing with margin obsolete around apex, *Protalebra* n. gen.

Appendix absent.

Wing margined and with

Three apical cells (exclusive of costal), *Eualebra* n. gen.

Two apical cells.

Body short, robust, * *Erythria*.

Body comparatively long, slender, *Dicraneura*.

One apical cell, *Empoasca*.

Wing not margined and with

Three apical cells, *Eupteryx*.

Two apical cells, *Typhlocyba*.

Eualebra smithii n. sp.—Length 3 mm. Vertex very large, as long as pronotum, roundly angled in front and swollen out laterally a little in front of the eyes, this last being a character not before observed in the tribe. The face in the single specimen collapsed in drying. Head and below sordid whitish. Margin of vertex above antennal sockets, apex of first antennal joint, middle femora apically and middle tarsi at base, blackish. Pronotum and basal angles of scutel with fairly numerous small brown dots, the former in the middle behind with a large brown cloud; the latter with two larger round dots at middle, and apex, dark brown.

Elytra smoky subhyaline, with brown markings, the base of the clavus suffused with sanguineous. Base and apex of clavus, base of corium and entire apical portion to just within the anteapical cells, with fine brown dots. A very irregular brown band extending from middle of clavus to apex of costal cell. A large rectangular white spot on middle of costal area.

Described from a single male in the Herbert H. Smith collection, taken at Chapada, Brazil. This prettily marked little species presents more remarkable characters than any other Typhlocybid known to me, and is the type of the genus.

Protalebra singularis n. sp.—Length 3.5 mm. Vertex strongly produced and angled apically, plane, as long as or a little longer than pronotum. Basal half of vertex, pronotum, and basal half of scutel, orange, darker on the pronotum. Hind margin of pronotum narrowly white, the white narrowly margined internally with black. Anterior margin of head narrowly black, bordering this below

* This group has no known representatives in the American fauna. Its reduction would only be justified by a study of very complete and extensive European material. European students who have had that opportunity consider it distinct. The difference in form, provided it is constant throughout the two assemblages of species, is as good a generic character as any.

narrowly white, still below this on upper part of front more broadly black. Face below blackened, otherwise pale yellow, as are also the legs except tips of tarsal joints which are black. Sternum blackened.

Elytra golden brown, faintly dotted with paler; a spot at base of corium, a narrow oblique line crossing elytra from apical third of corium down and back to costa, and apical portions of second and third terminal nervures, white. All apical and the two sub-apical cells smoky subhyaline. The elytra in this species are very remarkable in that they possess two anteapical cells, an occurrence unparalleled in the Typhlocybini, and the three specimens I have are all alike in this respect. Not only does the wing indicate its true relationship, but the three very closely allied species, *similis*, *ninettae* and *unipuncta*, possess the normal elytral venation.

Female valve with a stout, median, triangular, black, margined tooth, the lateral angles broadly rounded.

Described from three specimens in the Herbert H. Smith collection, taken at Chapada, Brazil, in April. Of these, one has lost its abdomen, the other two are male and female. The plane vertex margined anteriorly with white and black gives this species a striking resemblance to Scaphoidens.

Protalebra similis n.sp.—Length 3 mm. Closely resembling *singularis* but smaller; elytra without anteapical cell, and proportionally shorter. Vertex, pronotum and scutel colored the same as in *singularis* except somewhat brighter. Face, sternum and venter except last segment, blackish brown. Elytra with general plan of coloration as in *singularis*. Veins of clavus back of diagonal white band black, this band on corium proximally margined with black. Cubital vein black except for two small whitish interrup-

tions, and costal cell apically with a diagonal black spot. The golden brown portions of basal half of elytra without the minute pale dots found in *singularis*.

Described from three specimens in the Herbert H. Smith collection, male and female, taken at Corumba, Brazil, in April. The resemblance to *singularis* is remarkable.

Protalebra ninettae n. sp.—Length 2.5 mm. Form of *singularis*, but vertex slightly convex, giving the head a somewhat tumid appearance. Head pale yellowish, a large round spot on tip of vertex and one on either side just below edge of vertex black; lower part of face bright sanguineous. Pronotum orange, the hind margin white bordered before with black as in *singularis*, but the black line extended forward on to the disc of the pronotum in two large black teeth; between these teeth white with a small black spot. Scutell orange, the apical half white. Costal and apical portions of elytra whitish or smoky-subhyaline, a large spot at middle of costal area, and the veins surrounding outer apical cell, blackish. Rest of elytra pale golden brown, with a white band reaching from brachial nerve on one side across apex of clavus to the brachial nerve on the other side. This white band is not oblique, and is bordered proximally with blackish, the veins back of it blackish.

Described from a unique specimen in the Herbert H. Smith collection, taken at Chapada in August. The species of *Protalebra* are about the most delicately beautiful Jassids I have ever seen, not even excepting certain Tettigoniids, and this species is the gem of the genus. On this account, I have dedicated it to my wife, who has been of the greatest assistance to me in my scientific work.

Protalebra unipuncta n. sp. — Length 3 mm. Resembling *ninettae* but larger. Head very bluntly angled in front, scarcely three-fourths the length of the pronotum. Head and all below pale yellowish, apex of the former with a large, round black spot, vertex brownish towards the base. Pronotum pale golden brown, the hind margin narrowly obscure whitish; in front of this whitish margin, medially with two large oblong black spots which diverge forward, on either side of these is a small black spot; anteriorly with a median blackish dash. Elytra golden brown, an extensive costal area smoky subhyaline, the apical veins whitish; a diagonal white band extending from apical two-thirds of clavus down and forward but a short distance on to corium, this band anteriorly margined with blackish. Clavus with two longitudinal black dashes, the outer shorter. Female valve strongly rounded behind.

Described from four specimens, male and female, in the Herbert H. Smith collection, taken at Chapada in January. The four species, *singularis*, *similis*, *ninettae*, and *unipuncta* form a group of very closely allied species. While alike in general appearance, after the manner, for instance, of *Tettigonia rufipes*, *12-punctata*, and *crassa*, or the members of the *colorata* group, still their differences are striking and unmistakable.

Protalebra vexillifera n. sp. — Length 3.5 mm. Vertex rather strongly but roundly and almost tumidly angulate in front, the vertex convex. Color very pale yellowish. Peduncle of antennae, a median spot on anterior portion of pronotum, and a spot on propleura extending up to hind angles of pronotum, brick red. Pronotum posteriorly ivory white. Scutell with a black band across tip, leaving only a minute white point beyond. Elytra with a broad white sub-

diagonal band passing from middle of claval commissure to costa, where it is reflexed and extended diagonally upward and backward to the transverse veinlets in a boot-shaped white stripe; the transverse white band is narrowly margined before with blackish, behind with sanguineous. Other than the markings, the elytra are pale sordid yellowish basally, becoming smoky subhyaline apically. Inner apical cells with a large whitish hyaline area.

Described from one female and three males in the Herbert H. Smith collection, taken at Chapada, Brazil, in April.

Protalebra terminata n. sp. — Length 3.5 mm. Vertex shorter than pronotum, rather strongly but almost tumidly angulate, convex above. Face rather tumid and greatly lengthened. Pronotum, head, and all beneath pale sordid yellowish. Two small golden dashes on middle of pronotum, the median line sometimes white. Elytra before transverse veins whitish subhyaline marked with golden; clavus with an irregular spot at base and an incomplete circle at middle; corium with three equidistant, fine, transverse, wavy lines. Beyond the transverse veins, uniform deep, smoky in some cases, in others this cloud is broken up more or less by round hyaline spots.

Described from four females and one male in the Herbert H. Smith collection, taken at Chapada, Brazil in April.

Protalebra amoena n. sp. — Length 3 mm. Form much as in *terminata*. Pale yellowish, vertex, a broad median portion of pronotum and inner basal margins of elytral broadening to middle of claval commissure, washed with sanguineous. Elytra hyaline with two golden clouds in region of brachial cell, the apical one smaller and inclined to reddish. Inner apical margin of elytra irregularly fuscous.

Described from a single male in the Herbert H. Smith collection, taken at Chapada, Brazil, in January.

Protalebra brasiliensis n.sp.—Length 2.75 mm. Face elongate, vertex shorter than pronotum and tumidly angulate. Color sordid yellow. Vertex with three dark dots on basal margin. Pronotum and scutellum dark fuscous; the former with three minute light dots anteriorly and four larger in a transverse row behind; scutellum with a slender median line and a dot on either side light. Elytra with large lemon yellow areas as follows: one at base, one at middle of corium, and a common commissural area resting on apex of clavus; the basal area is just before basal margin and extends from costa to brachial cell; both are diagonal, extending up and back. The interspace between these areas is dark smoky, becoming lighter apically, the tips hyaline. The dark interspace with hya-

line spots, which are particularly noticeable just beyond transverse veinlets.

Described from many specimens in the Herbert H. Smith collection, taken at Chapada and Corumba, Brazil, from January to April. This species has somewhat of a resemblance in the character of the markings to certain *Typhlocybas* of the *comes* group.

Protalebra curvilinea (Gill.)

Protalebra bifasciata (Gill.)

Protalebra trimaculata (Gill.)

Protalebra robusta (Gill.)

These four species described under *Alebra* by Gillette, belong in *Protalebra*, of which genus *curvilinea* may be taken as the type. The types of all the species discussed above are now in the National Museum.

SOME CALIFORNIA BEES.

BY CARROLL FOWLER, DUARTE, CAL.

HERIADES Spinola.

One specimen belonging to this genus has been collected at Berkeley, and it represents a new species. The only other species recorded from this State is *H. albicinctum* Prov. from Los Angeles.

Heriades glaucum n.sp. — ♂. Length 5.5 mm. Bluish-green, clothed with thin white pubescence. Head broader than thorax, dark green, finely punctured, clothed with long white pubescence, dense on clypeus and cheeks; mandibles black. Antennae brownish-black, reaching to the base of the abdomen. Thorax dark bluish-green, finely and densely punctured, clothed with long pubescence, denser on metathorax and pleu-

ra. Wings with a brownish tinge darker in marginal cell; second submarginal cell a little longer than the first, narrowed nearly one half toward the marginal and receiving the first recurrent vein one fourth its length from base and the second one fifth from tip. Legs dark green, clothed with thin white pubescence, on tarsi beneath yellow; tibial spurs and claws brownish. Abdomen dark bronze-green with bluish reflection in certain lights; densely punctured, narrow apical margins of the segments smooth and pale brown; the whole clothed with a very short thin white pubescence longer and denser on the apical segments and venter.

Habitat. Berkeley, Cal. May 1. One specimen.